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Supplemental Material

Genes Interacting with Occupational Exposures to Low Molecular Weight Agents and Irritants on Adult-Onset Asthma in Three European Studies

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Figure S3. Association between T allele at rs6504453 in *PRKCA* and gene expression in lung tissue (eQTL browser GTEx, Gibson et al. 2015).

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Supplemental Code and Data ZIP File Index

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Excel File Table S2. List of the 163 genes selected using the candidate pathway-based strategy

Excel File Table S3. List of the 17 pathways in which the four genes are involved among the other relevant genes selected by the candidate pathway-based strategy **Excel File Table S4.** Regulatory elements of the four loci (1q31.1, 2q24.2, 11q13.1 and 14q12) containing SNPs in bold (rs932476, rs2667026, rs931127, rs7949980, rs1958980, rs11847351, and rs1958987) interacting with occupational exposures to LMW agents or irritants on current adult-onset asthma. Functional annotation of these SNPs (or SNPs in high LD (D'>0.9; r2>=0.8) was searched using HaploReg (http://www.broadinstitute.org/mammals/haploreg/haploreg.php, Ward and Kellis, 2012). In this table are indicated the cell lines in which elements are present (enhancer histone marks and DNase hypersensitivity sites) or regulatory motifs or the type protein that binds to this specific site (Proteins bound).

Excel File Table S5. Chemical retrieved from the Comparative Toxicogenomics Database (CTD, URL: http://ctdbase.org/, Davis et al. 2014) and interacting with the five genes (PLA2G4A, PLA2R1, PRKCA, PRKD1 and RELA). In this table are indicated the LMW agents/irritants/cleaning products or disinfectants evaluated by job specific questionnaires (see Table E1) or exposures known to contain compounds with irritant properties (air pollutants and vehicle emissions).